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RESEARCH MEMORANDUM

NAVY ENLISTED CLASSIFICATION (NEC) REPORTING TO THE ENLISTED MASTER RECORD (EMR) FILE

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A Division of CNA Hudson Institute

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The research memorandum summarizes an analysis carried out at the Center for Naval Analyses (CNA) to determine the timeliness of the Navy Enlisted Classification (NEC) reports to the Enlisted Master Record (EMR). Using quarterly EMR files from June 1983 to June 1984 and from June 1986 to June 1987, analysts estimated the NEC reporting lags (i.e., times between the date the NEC is awarded and the date the NEC is posted to an individual's EMR record). The results indicate that NEC reporting lags are relatively rare. Over 90 percent of the NECs appeared on the quarterly EMR within four months of their being awarded. Looking ahead only one quarter, therefore, seems to be sufficient for achieving a relatively complete count, whether one is estimating the number of new awards or determining the total count.

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1. Enclosure (1) is forwarded as a matter of possible interest.

2. This Research Memorandum examines the reporting of NECs to the EMR. The award date of the NEC was compared to the appearance of the NEC on the EMR. The analysis found that significant reporting lags were rare.

Robert F. Lockman

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NAVY ENLISTED CLASSIFICATION (NEC) REPORTING TO THE ENLISTED MASTER RECORD (EMR) FILE

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ABSTRACT

This research memorandum summarizes an analysis carried out at the Center for Naval Analyses (CNA) to determine the timeliness of the Navy Enlisted Classification (NEC) reports to the Enlisted Master Record (EMR). Using quarterly EMR files from June 1983 to June 1984 and from June 1986 to June 1987, analysts estimated the NEC reporting lags (i.e., times between the date the NEC is awarded and the date the NEC is posted to an individual's EMR record). The results indicate that NEC reporting lags are relatively rare. Over 90 percent of the NECs appeared on the quarterly EMR within four months of their being awarded. Looking ahead only one quarter, therefore, seems to be sufficient for achieving a relatively complete count, whether one is estimating the number of new awards or determining the total count.

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INTRODUCTION

Navy Enlisted Classification (NEC) codes identify an individual's particular skills in more detail than the Navy occupational or rating structure. To Navy detailers, trainers, and analysts, NECs reported to the Enlisted Master Record (EMR) files are an important source of information on valid earned qualifications and skills of enlisted personnel. Analysts at the Center for Naval Analyses (CNA) use NEC data on the CNA-held quarterly EMR files to examine both the amount and usage of skills held by personnel. Accurate and timely reporting of NECs to the EMR is important to CNA analysis as well as to manpower managers involved in day-to-day personnel policy.

This paper summarizes an analysis done at CNA on the timeliness of NEC reports to the EMR. The primary focus is on whether or not there is a lag in the reporting of new NECs to the EMR. A previous study[1] found that, for new NECs on the September 1985 (S85) EMR file, only 80 percent had FY 1985 award dates (9 percent had FY 1984 award dates, and 11 percent had FY 1983 or earlier dates). In that analysis, a new NEC was defined as an NEC that appeared on the S85 EMR but was not on the S84 EMR. In this memorandum, new NECs are defined as NECs that did not appear on the previous quarterly EMR.

It should be noted that the analysis summarized here deals only with NECs that are, at some point, recorded in the EMR. Some NECs never get reported to the EMR. The exact number is unknown and could be determined only by checking other data sources such as schoolhouse records and individuals' service records.[2]

The paper is organized as follows. In the next section, the reporting lags for NECs appearing on the March 1987 (M87) EMR are examined in detail. They are compared to the March 1984 (M84) EMR reporting lags to see if there are any significant changes. Several anomalies in NEC reporting are noted. The section that then follows provides preliminary estimates of the reporting lag, based on quarterly EMRs from June 1983 (J83) to June 1984 (J84) and June 1986 (J86) to June 1987 (J87). New NECs on those EMRs are tabulated by award date and by the date of their first appearance on the EMR. The reporting lag and the average proportion of NEC awards observed within at most zero to five months are computed. The final section of the paper discusses ways of accounting for unreported NECs in studies using NEC data.

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1. CNA Research Memorandum 86-84, *The Navy Enlisted Classifications (NECs): A History*, by Aline Quester and George Corliss, Apr 1986.
2. Code 50 personnel of the Enlisted Personnel Management Center (EPMAC) are engaged in such a task. Between March 1986 and July 1987, they recovered almost 15,000 "lost" NECs.

The results of this NEC reporting analysis indicate that NEC reporting lags are relatively rare and that NEC undercounts caused by unreported NECs are small. Over 90 percent of NECs first appearing on the EMR were awarded four or fewer months previously. Whether one is estimating the number of new awards or the total inventory, looking ahead one quarter seems to be sufficient.

NEC REPORTING: A CROSS-SECTION LOOK

In this section, the distribution of the new NECs appearing in a given quarter is examined. Table 1 shows the distribution of new NECs on the March 1987 EMR by award date. A new NEC is defined as one that appears on the individual's record in March 1987 (M87) but does not appear on the December 1986 (D86) EMR record for that individual. The potential reporting lag (in months) is determined by comparing the award date of the NEC with the EMR date. An award date of March 1987 implies a report lag of 0 months; an award date of February 1987 implies a one-month lag; and so on. Because quarterly EMRs are used, the numbers in column two are an upper bound on the actual reporting lag. For example, NECs earned in January 1987 cannot be observed until March, so they are characterized as having a two-month lag, although the true reporting lag could be shorter.

Using these definitions, the total number of new NECs on the M87 EMR is slightly over 20,000. Of these, 614 (3 percent) had missing award dates. There were also over 500 NECs with award dates after March 1987. A further investigation of this anomaly is summarized in table 2, which gives the distribution of the NECs with post-March 1987 award dates by NEC group. The NECs are grouped based on the first two digits of the NEC.[1] The majority of NECs with post-March 1987 award dates (about 53 percent) are coded with 99XX. Reference to the October 1985 and July 1987 NEC manuals revealed only one 99XX NEC code. NEC 9901, titled Nuclear Propulsion Operator Trainee, identifies personnel recruited for nuclear propulsion training. Although considered a Special Series NEC, it seems its function is more closely related to an Entry Series NEC, which identifies personnel in training for a rating.

Of the NECs with post-March 1987 award dates, 92 were in the 83XX group, which includes aircraft systems maintenance personnel. Some 83XX NECs require both formal (schoolhouse) and on-the-job (OJT) training. It appears that these NECs were posted to the EMR after completion of the schoolhouse requirement but prior to completion of OJT, although the award date posted included the additional time required for the award. Interestingly, all the NECs with post-March 1987 award dates have dates of at most one month in the future.

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1. NECs for a given source rating are identified, in general, by the first two digits.

TABLE 1

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORTING LAG:
D86 TO M87

Award date	Months from March 1987	Number	Proportion	Cumulative proportion
Mar 1987	0	5,191	0.27	0.27
Feb 1987	1	5,052	0.26	0.53
Jan 1987	2	3,435	0.18	0.70
Dec 1986	3	3,760	0.19	0.90
Nov 1986	4	324	0.02	0.91
Oct 1986	5	115	0.01	0.92
Sep 1986	6	96	0.00	0.92
Aug 1986	7	73	0.00	0.93
Jul 1986	8	74	0.00	0.93
Jun 1986	9	65	0.00	0.93
May 1986	10	49	0.00	0.94
Apr 1986	11	64	0.00	0.94
Mar 1986	12	67	0.00	0.94
Feb 1986	13	45	0.00	0.95
Jan 1986	14	36	0.00	0.95
Dec 1985	15	32	0.00	0.95
Nov 1985	16	36	0.00	0.95
Oct 1985	17	27	0.00	0.95
Sep 1985	18	46	0.00	0.96
Aug 1985	19	23	0.00	0.96
Jul 1985	20	14	0.00	0.96
Jun 1985	21	52	0.00	0.96
May 1985	22	45	0.00	0.96
Apr 1985	23	15	0.00	0.96
Mar 1985	24	55	0.00	0.97
Feb 1985	25	44	0.00	0.97
Jan 1985	26	14	0.00	0.97
Dec 1984	27	35	0.00	0.97
Nov 1984	28	21	0.00	0.97
Oct 1984	29	15	0.00	0.97
Sep 1984	30	15	0.00	0.97
Aug 1984	31	11	0.00	0.97
Jul 1984	32	9	0.00	0.97
Jun 1984	33	10	0.00	0.98
May 1984	34	20	0.00	0.98
Apr 1984	35	12	0.00	0.98
Mar 1984	36	13	0.00	0.98
Feb 1984	37	15	0.00	0.98
Jan 1984	38	2	0.00	0.98
Dec 1983	39	9	0.00	0.98
Nov 1983	40	11	0.00	0.98
Earlier	>40	404	0.02	1.00
Total		19,451		

New NECs with no NEC award date	614
New NECs with post-M87 award date	519
Individuals with new NEC	20,031
Number of new NECs	20,584

TABLE 2

DISTRIBUTION OF NEW NECs WITH
POST-M87 AWARD DATES,
BY NEC GROUP

NEC group	Number	Percentage
4XX	1	0.00
7XX	2	0.00
8XX	2	0.00
11XX	1	0.00
15XX	1	0.00
19XX	1	0.00
21XX	1	0.00
23XX	13	0.03
27XX	8	0.02
33XX	5	0.01
38XX	1	0.00
42XX	9	0.02
53XX	1	0.00
83XX	92	0.18
84XX	28	0.05
91XX	1	0.00
95XX	79	0.15
99XX	273	0.53

Returning to table 1 and the distribution of M87 new NECs by length of reporting lag, over 91 percent of the NECs[1] have award dates within four months of when they are first reported. NECs with a potential reporting lag of greater than four months are fairly evenly distributed across months. The pattern is quite similar for the NECs on the M84 EMR, as can been seen from table 3. It does not appear that the timeliness of NEC reporting has changed that much; 92 percent of NECs in M84 have award dates within four months.

Further examination of the new NECs in M84 and M87 revealed that, for many of these NECs, there was a different NEC on the preceding EMR (D83 or D86) with the same award date. Because it seems unlikely that an individual is awarded more than one NEC in a month, a further investigation of these NECs seemed important. Table 4 gives the distribution by NEC group of new NECs (in both M84 and M87) with the same award date as an old NEC. A listing of the new and old NECs for M87 is given in

1. Excluding NECs with a future award date or no award date.

TABLE 3

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORTING LAG:
D83 TO M84

Award date	Months from March 1984	Number	Proportion	Cumulative proportion
Mar 1984	0	2,913	0.16	0.16
Feb 1984	1	6,665	0.36	0.52
Jan 1984	2	3,768	0.21	0.73
Dec 1983	3	3,484	0.19	0.92
Nov 1983	4	103	0.01	0.92
Oct 1983	5	85	0.00	0.93
Sep 1983	6	112	0.01	0.93
Aug 1983	7	73	0.00	0.94
Jul 1983	8	51	0.00	0.94
Jun 1983	9	81	0.00	0.94
May 1983	10	59	0.00	0.95
Apr 1983	11	84	0.00	0.95
Mar 1983	12	48	0.00	0.95
Feb 1983	13	80	0.00	0.96
Jan 1983	14	22	0.00	0.96
Dec 1982	15	37	0.00	0.96
Nov 1982	16	47	0.00	0.96
Oct 1982	17	39	0.00	0.97
Sep 1982	18	30	0.00	0.97
Aug 1982	19	29	0.00	0.97
Jul 1982	20	25	0.00	0.97
Jun 1982	21	27	0.00	0.97
May 1982	22	17	0.00	0.97
Apr 1982	23	23	0.00	0.97
Mar 1982	24	12	0.00	0.98
Feb 1982	25	14	0.00	0.98
Jan 1982	26	12	0.00	0.98
Dec 1981	27	23	0.00	0.98
Nov 1981	28	25	0.00	0.98
Oct 1981	29	25	0.00	0.98
Sep 1981	30	9	0.00	0.98
Aug 1981	31	9	0.00	0.98
Jul 1981	32	6	0.00	0.98
Jun 1981	33	8	0.00	0.98
May 1981	34	7	0.00	0.98
Apr 1981	35	10	0.00	0.98
Mar 1981	36	7	0.00	0.98
Feb 1981	37	7	0.00	0.98
Jan 1981	38	7	0.00	0.98
Dec 1980	39	11	0.00	0.99
Nov 1980	40	6	0.00	0.99
Earlier	>40	263	0.01	1.00
Total		18,363		

New NECs with no award date	223
New NECs with post-M84 award date	580
Number of new NECs	19,166
Individuals with new NEC	18,512

TABLE 4

DISTRIBUTION OF NEW NECs WITH SAME AWARD DATE
AS AN OLD NEC, BY NEC GROUP

March 1984			March 1987		
NEC group	Number	Percent	NEC group	Number	Percent
3XX	2	0.00	3XX	4	0.00
4XX	1	0.00	4XX	3	0.00
			6XX	1	0.00
			7XX	2	0.00
8XX	1	0.00	8XX	1	0.00
11XX	28	0.06	11XX	1	0.00
14XX	73	0.15	14XX	95	0.12
15XX	3	0.01			
17XX	2	0.00	17XX	5	0.01
18XX	1	0.00			
23XX	9	0.02	23XX	1	0.00
28XX	1	0.00	28XX	572	0.71
33XX	69	0.14	33XX	28	0.03
			41XX	1	0.00
42XX	6	0.01			
45XX	1	0.00	45XX	1	0.00
			46XX	3	0.00
			47XX	30	0.04
49XX	1	0.00	49XX	1	0.00
53XX	9	0.02	53XX	5	0.01
58XX	9	0.02	58XX	4	0.00
			64XX	3	0.00
65XX	1	0.00	65XX	2	0.00
66XX	232	0.48	66XX	3	0.00
68XX	1	0.00			
71XX	2	0.00			
			78XX	1	0.00
			79XX	1	0.00
			80XX	2	0.00
82XX	3	0.01	82XX	3	0.00
83XX	4	0.01	83XX	9	0.01
87XX	10	0.02			
91XX	1	0.00	91XX	1	0.00
92XX	2	0.00	92XX	2	0.00
95XX	13	0.03	95XX	21	0.03
Total	485	1.00	Total	806	1.00

appendix A. Except for a few anomalies, the switch in the NECs is within an NEC group and often involves component or related NECs.[1]

For M87 the majority of these NECs (over 71 percent) are in the 28XX group. In fact, all of these are NEC 2822 on the M87 EMR, replacing NEC 2817 on the D86. The NEC manual indicates that NEC 2822 is a new NEC that identifies individuals with NEC 2817 plus 12 months' experience in a relevant billet. It appears that when the NEC was created, all those individuals with 2817 and the required experience were awarded 2822, but the award date of 2817 was used. Similar explanations can be given for the other cases in table 4.

For this set of NECs, therefore, the delay in NEC reporting is more apparent than real. The true award dates for these NECs probably fall primarily in the three months preceding the EMR. Table 5 shows the distribution of these NECs by the length of the apparent reporting lag. It can be seen that, as the reporting lag increases, NECs with the same award dates as an old NEC account for an increasingly large proportion of the total. Over 60 percent of the NECs with a lag of greater than 12 months are NECs of this type. Whether other NECs that appear to be reported with a lag are also the result of reporting policy is unknown. In any case, these findings indicate that use of the NEC award date from the EMR can occasionally be misleading.

TIME-SERIES ESTIMATION OF REPORTING LAGS

In each of the two quarters examined in the preceding section, it was found that over 91 percent of the new NECs had award dates within four months of when they first appeared on the EMR. If the number of NECs awarded is the same from month to month, and if the observed patterns of reporting are representative, then this result implies that 91 percent of the NECs awarded in a given month will appear on the EMR within four months of their award date. Because it is not clear that the number of NECs awarded is constant over time, further investigation of reporting delays seemed worthwhile.

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1. The NEC manual distinguishes principal, component, and related NECs. A component NEC is a prerequisite for a principal NEC, while a related NEC has a "significant relationship to a principal NEC" but is not a prerequisite for it. When an individual earns a principal NEC, any component or related NECs are removed from his or her record.

TABLE 5

DISTRIBUTION OF NEW NECs WITH SAME AWARD DATE AS AN OLD NEC
BY MONTHS OF REPORT LAG: M87

Months from March 1987	Number of NECs: Total	Number of NECs: As a fraction of all NECs with that lag
3	12	0
4	14	4
4	3	3
6	13	14
7	3	4
8	14	19
9	16	25
10	16	33
11	19	30
12	19	28
13	17	38
14	5	14
15	6	19
16	10	28
17	8	30
18	19	41
19	14	61
20	2	14
21	41	79
22	29	64
23	6	40
24	37	67
25	38	86
26	3	21
27	22	63
28	11	52
29	2	13
30	9	60
31	8	73
32	3	33
33	4	40
34	18	90
35	10	83
36	11	85
37	12	80
38	0	0
39	6	67
40	9	82
>40	317	78

Two sets of five consecutive quarterly EMRs were used to tabulate NECs by award date and report date. Table 6 displays the results for the June 1986 to June 1987 set and table 7 displays the results for the June 1983 to June 1984 set. For each award date, the number of NECs that first appeared on each of the five EMRs is shown. For example, there were 2,765 NECs first observed on the J86 EMR with June 1986 award dates. The last column in each table, labeled total, gives the sum of NECs on the five EMRs for each award month. For instance, 7,613 NECs with an award date of June 1986 first appeared on one of the five EMRs. Several totals were not computed, as the five EMRs examined do not allow for estimation of the total number of awards.[1]

The distributions in tables 6 and 7 can be used to estimate the proportion of NECs reported with various lags. Because only quarterly EMRs are available, only certain months can be used to estimate each proportion. For example, only March, June, September, and December data can be used to estimate the fraction of NECs reported in less than a month; only February, May, August, and November data can be used to estimate the fraction of NECs reported with a lag of one month or less; and so on. The results of these calculations, along with average proportions, are shown in tables 8 and 9 for the two distributions.

Looking first at the J86 to J87 results (table 8), the proportion of NECs with a lag of less than four weeks varies from 36 percent for June 1986 awards to over 70 percent for March 1987 awards.[2] On average, a little over half (52 percent) of NECs have at most a four-week reporting lag. For the J83 to J84 set (table 9), 59 percent of NECs have a four-week reporting lag, on average. By the next month, the proportion of NECs reported increases substantially. Between J86 and J87, on average, 92 percent of NECs awarded are reported in the same month or within the next month. This average increases slightly, to 94 percent, for NECs awarded between J83 and J84. Because the remaining 8 (6) percent include the NECs with award dates that should not be used to examine reporting lag (e.g., award date of component NEC), between 92 (94) percent is conservative. Note that for both sets there has been much more variation over time in the proportion of awards observed within a month than in the proportions of awards having greater lags.

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1. All the totals are underestimates of the true number of NEC awards, as some awards are not reported for many months and some are never reported.

2. It should be kept in mind that the underestimation of the total number of NECs (and resulting overestimation of the fraction of NECs reported) is more severe for more recent award dates.

TABLE 6

NUMBER OF NECs BY AWARD DATE AND DATE OF FIRST EMR OBSERVATION: J86 TO J87

	EMR date					
Award date	J86	S86	D86	M87	J87	Total
Jun 1987	--	--	--	--	3,698	--
May 1987	--	--	--	--	5,798	--
Apr 1987	--	--	--	--	6,534	--
Mar 1987	--	--	--	5,191	2,180	7,371
Feb 1987	--	--	--	5,052	438	5,490
Jan 1987	--	--	--	3,435	103	3,538
Dec 1986	--	--	2,539	3,760	102	6,401
Nov 1986	--	--	6,577	324	62	6,963
Oct 1986	--	--	8,056	115	47	8,218
Sep 1986	--	5,111	3,104	96	72	8,383
Aug 1986	--	5,338	415	73	36	5,862
Jul 1986	--	6,145	130	74	49	6,398
Jun 1986	2,765	4,632	102	65	49	7,613
May 1986	6,879	395	114	49	37	7,474
Apr 1986	7,406	324	88	64	29	7,911
Mar 1986	4,903	154	67	67	28	--
Feb 1986	223	142	95	45	21	--
Jan 1986	172	91	28	36	7	--

TABLE 7

NUMBER OF NECs BY AWARD DATE AND DATE OF FIRST EMR OBSERVATION: J83 TO J84

	EMR date					
Award date	J83	S83	D83	M84	J84	Total
Jun 1984	--	--	--	--	2,833	--
May 1984	--	--	--	--	6,800	--
Apr 1984	--	--	--	--	5,300	--
Mar 1984	--	--	--	2,913	3,286	6,181
Feb 1984	--	--	--	6,665	113	6,778
Jan 1984	--	--	--	3,768	59	3,827
Dec 1983	--	--	3,774	3,484	95	7,353
Nov 1983	--	--	6,433	103	22	6,558
Oct 1983	--	--	5,922	85	28	6,035
Sep 1983	--	3,090	3,844	112	34	7,080
Aug 1983	--	5,876	801	73	26	6,776
Jul 1983	--	6,261	117	51	19	6,448
Jun 1983	11,556	478	100	81	34	12,249
May 1983	5,853	118	75	59	26	6,131
Apr 1983	4,109	300	85	84	19	4,597
Mar 1983	169	43	102	48	10	--
Feb 1983	188	77	127	80	6	--
Jan 1983	71	29	61	22	7	--

TABLE 8

LIKELIHOOD OF EMR APPEARANCE
BY TIME SINCE AWARD:
J86 TO J87

Reporting lag (EMR date minus award date)	Award date	EMR date	Proportion of awards with that award date observed on that EMR	Average proportion of awards observed
0	Jun 86	Jun 86	.36	
	Sep 86	Sep 86	.61	.52
	Dec 86	Dec 86	.40	
	Mar 87	Mar 87	.70	
1	May 86	Jun 86	.92	
	Aug 86	Sep 86	.91	.92
	Nov 86	Dec 86	.94	
	Feb 87	Mar 87	.92	
2	Apr 86	Jun 86	.94	
	Jul 86	Sep 86	.96	.96
	Oct 86	Dec 86	.98	
	Jan 87	Mar 87	.97	
3	Jun 86	Sep 86	.97	
	Sep 86	Dec 86	.98	.98
	Dec 86	Mar 87	.98	
4	May 86	Sep 86	.97	
	Aug 86	Dec 86	.98	.98
	Nov 86	Mar 87	.99	
5	Apr 86	Sep 86	.98	
	Jul 86	Dec 86	.98	.98
	Oct 86	Mar 87	.99	

Note: The reporting lag is the maximum reporting lag, i.e., for one month it is at most one month and includes all NECs with less than one-month lag.

TABLE 9

LIKELIHOOD OF EMR APPEARANCE
BY TIME SINCE AWARD:
J83 TO J84

Reporting lag (EMR date minus award date)	Award date	EMR date	Proportion of awards with that award date observed on that EMR	Average proportion of awards observed
0	Jun 83	Jun 83	.94	.59
	Sep 83	Sep 83	.44	
	Dec 83	Dec 83	.51	
	Mar 84	Mar 84	.47	
1	May 83	Jun 83	.95	.94
	Aug 83	Sep 83	.87	
	Nov 83	Dec 83	.98	
	Feb 84	Mar 84	.98	
2	Apr 83	Jun 83	.89	.96
	Jul 83	Sep 83	.97	
	Oct 83	Dec 83	.98	
	Jan 84	Mar 84	.98	
3	Jun 83	Sep 83	.98	.98
	Sep 83	Dec 83	.98	
	Dec 83	Mar 84	.99	
4	May 83	Sep 83	.97	.98
	Aug 83	Dec 83	.99	
	Nov 83	Mar 84	.99	
5	Apr 83	Sep 83	.96	.98
	Jul 83	Dec 83	.99	
	Oct 83	Mar 84	.99	

Note: The reporting lag is the maximum reporting lag, i.e., for one month it is at most one month and includes all NECs with less than one-month lag.

CONCLUSION

It is obvious that there are lags in reporting NECs to the EMR. However, the analysis here implies that the delays are not as severe as previously thought. The next question is: How should the lags be accounted for in studies using NEC data?

To some extent, the answer to this question depends on the problem at hand. Two NEC variables that are often used are the number of NECs awarded during a specific period of time (such as a fiscal year) and the total NEC inventory. Because it is the most recent awards that are undercounted the most, looking only at current data will lead to a more severe underestimate of new awards than of the total inventory.

There are two possible solutions to undercounts of NECs resulting from reporting lags. One is to use later quarters of data. Consider first the problem of measuring the number of new NEC awards. The left side of table 10 shows how many NECs would be added to the count of NECs awarded in the previous year, starting from various dates, by looking ahead one or two quarters. Assuming that NECs were being awarded at an annual rate of 85,000 during this period, in the worst case (June 1986) 7.5 percent of the previous year's awards would not be observed until the following quarter.

The right side of table 10 shows how many NECs would be added to the NEC inventory by looking ahead one or two quarters. Using the September 1986 NEC inventory (375,751) as a base, in the worst case (again June 1986) less than 2 percent would be added to the inventory by looking ahead one quarter.[1] Whether estimating the number of new awards or the total inventory, looking ahead one quarter seems to be sufficient; looking ahead to a second quarter does not add many NECs.

For recent data, it is not possible to look ahead one or two quarters. In this case, if past estimates of the reporting lag are felt to be reliable, they can be used to adjust current data upward to account for unreported NECs. Tables 8 and 9 indicate that while it might be difficult to estimate the total number of NECs awarded in the current month from EMR data, NEC awards for previous months can be estimated with a fair degree of certainty.

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1. If NECs with the same award date as an old NEC were screened out, the percentage would be even smaller.

TABLE 10

NUMBER OF NECs ADDED BY LOOKING AT FUTURE EMRs

Base quarter	Number from previous 12 months: One quarter ahead	Number from previous 12 months: Two quarters ahead[a]	Number from all previous months: One quarter ahead	Number from all previous months: Two quarters ahead[a]
Mar 86	5,653	1,226	6,705	1,951
Jun 86	6,333	1,106	7,302	1,866
Sep 86	4,648	664	5,515	1,574
Dec 86	4,768	539	5,773	820
Mar 87	3,204	NA	3,541	NA

a. Number of NECs in addition to those found one quarter ahead.

APPENDIX A

LISTING OF NECs WITH AWARD DATES OF PREVIOUS NEC

APPENDIX A

LISTING OF NECs WITH AWARD DATES OF PREVIOUS NEC

Table A-1 is a listing of the NECs that first appeared on the M87 quarterly EMR and that had the same award date as a different NEC on the D86 EMR. The records are sorted first by old NEC, then by award date. The month and year columns are the difference between the award date and M87 measured in months and years, respectively.

TABLE A-1

LISTING OF NEW NECs WITH SAME AWARD DATE
(D86 TO M87- SORTED BY D86 NEC)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
0313	8312	0318	8312	39	3.3
0316	8601	0321	8601	14	1.2
0316	8612	0321	8612	3	0.3
0321	7904	0316	7904	95	7.9
0428	8302	0421	8302	49	4.1
0445	8504	0450	8504	23	1.9
0457	8607	0440	8607	8	0.7
0612	8612	0619	8612	3	0.3
0746	8611	0812	8611	4	0.3
0746	8611	0812	8611	4	0.3
0876	8603	0812	8603	12	1.0
1166	7711	6611	7711	112	9.3
1422	8612	1446	8612	3	0.3
1444	8612	1422	8612	3	0.3
1444	8612	9269	8612	3	0.3
1446	8612	1445	8612	3	0.3
1446	8612	1445	8612	3	0.3
1446	8612	1445	8612	3	0.3
1448	8612	1445	8612	3	0.3
1461	7608	1465	7608	127	10.6
1461	7708	1465	7708	115	9.6
1461	7906	1465	7906	93	7.8
1461	8207	1465	8207	56	4.7
1461	8210	1465	8210	53	4.4
1461	8403	1465	8403	36	3.0
1461	8412	1465	8412	27	2.3
1461	8412	1465	8412	27	2.3
1461	8501	1465	8501	26	2.2
1461	8602	1465	8602	13	1.1
1463	7106	1465	7106	189	15.8
1463	7301	1465	7301	170	14.2
1463	7609	1465	7609	126	10.5
1463	7704	1465	7704	119	9.9
1463	7705	1465	7705	118	9.8
1463	7811	1465	7811	100	8.3
1463	7811	1465	7811	100	8.3
1463	7811	1465	7811	100	8.3
1463	7904	1465	7904	95	7 9
1463	7906	1465	7906	93	7.8
1463	7906	1465	7906	93	7.8
1463	7908	1465	7908	91	7.6
1463	7911	1465	7911	88	7.3
1463	8012	1465	8012	75	6.3
1463	8012	1465	8012	75	6.3
1463	8012	1465	8012	75	6.3

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
1463	8105	1465	8105	70	5.8
1463	8105	1465	8105	70	5.8
1463	8106	1465	8106	69	5.8
1463	8107	1465	8107	68	5.7
1463	8107	1465	8107	68	5.7
1463	8107	1465	8107	68	5.7
1463	8109	1465	8109	66	5.5
1463	8206	1465	8206	57	4.8
1463	8206	1465	8206	57	4.8
1463	8206	1465	8206	57	4.8
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8210	1465	8210	53	4.4
1463	8212	1465	8212	51	4.3
1463	8212	1465	8212	51	4.3
1463	8212	1465	8212	51	4.3
1463	8301	1465	8301	50	4.2
1463	8301	1465	8301	50	4.2
1463	8302	1465	8302	49	4.1
1463	8302	1465	8302	49	4.[illegible]
1463	8304	1465	8304	47	3.[illegible]
1463	8304	1465	8304	47	3.9
1463	8304	1465	8304	47	3.9
1463	8306	1465	8306	45	3.8
1463	8306	1465	8306	45	3.8
1463	8306	1465	8306	45	3.8
1463	8307	1465	8307	44	3.7
1463	8307	1465	8307	44	3.7
1463	8308	1465	8308	43	3.6
1463	8308	1465	8308	43	3.6
1463	8308	1465	8308	43	3.6
1463	8311	1465	8311	40	3.3
1463	8402	1465	8402	37	3.1
1463	8402	1465	8402	37	3.1
1463	8402	1465	8402	37	3.1
1463	8404	1465	8404	35	2.9
1463	8404	1465	8404	35	2.9
1463	8404	1465	8404	35	2.9
1463	8404	1465	8404	35	2.9
1463	8404	1465	8404	35	2.9
1463	8404	1465	8404	35	2.9
1463	8405	1465	8405	34	2.8
1463	8405	1465	8405	34	2.8
1463	8407	1465	8407	32	2.7

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
1463	8501	1465	8501	26	2.2
1463	8502	1465	8502	25	2.1
1463	8502	1465	8502	25	2.1
1463	8504	1465	8504	23	1.9
1463	8505	1465	8505	22	1.8
1463	8505	1465	8505	22	1.8
1463	8505	1465	8505	22	1.8
1463	8605	1465	8605	10	0.8
1463	8607	1465	8607	8	0.7
14HA	8612	14ZH	8612	3	0.3
1731	8506	1734	8506	21	1.8
1731	8508	1733	8508	19	1.6
1731	8510	1734	8510	17	1.4
1731	8511	1733	8511	16	1.3
1731	8601	1734	8601	14	1.2
2342	8612	2304	8612	3	0.3
2813	7611	2318	7611	124	10.3
2817	7103	2822	7103	192	16.0
2817	7103	2822	7103	192	16.0
2817	7204	2822	7204	179	14.9
2817	7304	2822	7304	167	13.9
2817	7307	2822	7307	164	13.7
2817	7308	2822	7308	163	13.6
2817	7402	2822	7402	157	13.1
2817	7407	2822	7407	152	12.7
2817	7408	2822	7408	151	12.6
2817	7411	2822	7411	148	12.3
2817	7411	2822	7411	148	12.3
2817	7412	2822	7412	147	12.3
2817	7504	2822	7504	143	11 9
2817	7505	2822	7505	142	11.8
2817	7508	2822	7508	139	11.6
2817	7509	2822	7509	138	11.5
2817	7511	2822	7511	136	11.3
2817	7511	2822	7511	136	11.3
2817	7601	2822	7601	134	11.2
2817	7602	2822	7602	133	11.1
2817	7602	2822	7602	133	11.1
2817	7608	2822	7608	127	10.6
2817	7608	2822	7608	127	10.6
2817	7610	2822	7610	125	10.4
2817	7703	2822	7703	120	10.0
2817	7705	2822	7705	118	9 8
2817	7705	2822	7705	118	9 8
2817	7705	2822	7705	118	9 8
2817	7705	2822	7705	118	9.8
2817	7705	2822	7705	118	9.8
2817	7705	2822	7705	118	9.8
2817	7705	2822	7705	118	9.8
2817	7705	2822	7705	118	9.8
2817	7708	2822	7708	115	9.6

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	7708	2822	7708	115	9.6
2817	7708	2822	7708	115	9.6
2817	7708	2822	7708	115	9.6
2817	7708	2822	7708	115	9.6
2817	7711	2822	7711	112	9.3
2817	7711	2822	7711	112	9.3
2817	7711	2822	7711	112	9.3
2817	7711	2822	7711	112	9.3
2817	7806	2822	7806	105	8.8
2817	7806	2822	7806	105	8.8
2817	7806	2822	7806	105	8.8
2817	7901	2822	7901	98	8.2
2817	7902	2822	7902	97	8.1
2817	7903	2822	7903	96	8.0
2817	7904	2822	7904	95	7.9
2817	7904	2822	7904	95	7.9
2817	7904	2822	7904	95	7.9
2817	7907	2822	7907	92	7.7
2817	7907	2822	7907	92	7.7
2817	7907	2822	7907	92	7.7
2817	7907	2822	7907	92	7.7
2817	7912	2822	7912	87	7.3
2817	7912	2822	7912	87	7.3
2817	7912	2822	7912	87	7.3
2817	8001	2822	8001	86	7.2
2817	8002	2822	8002	85	7.1
2817	8002	2822	8002	85	7.1
2817	8003	2822	8003	84	7.0
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8004	2822	8004	83	6.9
2817	8006	2822	8006	81	6.8
2817	8006	2822	8006	81	6.8
2817	8006	2822	8006	81	6.8
2817	8006	2822	8006	81	6.8
2817	8006	2822	8006	81	6.8
2817	8006	2822	8006	81	6.8
2817	8009	2822	8009	78	6.5
2817	8009	2822	8009	78	6.5
2817	8009	2822	8009	78	6.5
2817	8011	2822	8011	76	6.3
2817	8011	2822	8011	76	6.3
2817	8012	2822	8012	75	6.3
2817	8012	2822	8012	75	6.3
2817	8101	2822	8101	74	6.2
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8103	2822	8103	72	6.0
2817	8104	2822	8104	71	5.9
2817	8106	2822	8106	69	5.8
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8108	2822	8108	67	5.6
2817	8112	2822	8112	63	5.3
2817	8112	2822	8112	63	5.3
2817	8112	2822	8112	63	5.3
2817	8112	2822	8112	63	5.3
2817	8112	2822	8112	63	5.3
2817	8201	2822	8201	62	5.2
2817	8202	2822	8202	61	5.1
2817	8202	2822	8202	61	5.1
2817	8202	2822	8202	61	5.1
2817	8203	2822	8203	60	5.0
2817	8203	2822	8203	60	5.0
2817	8203	2822	8203	60	5.0
2817	8203	2822	8203	60	5.0
2817	8205	2822	8205	58	4.8
2817	8205	2822	8205	58	4.8
2817	8205	2822	8205	58	4.8
2817	8205	2822	8205	58	4.8
2817	8205	2822	8205	58	4.8
2817	8207	2822	8207	56	4.7
2817	8207	2822	8207	56	4.7
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8208	2822	8208	55	4.6
2817	8209	2822	8209	54	4.5

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8301	2822	8301	50	4.2
2817	8301	2822	8301	50	4.2
2817	8302	2822	8302	49	4.1
2817	8302	2822	8302	49	4.1
2817	8302	2822	8302	49	4.1
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8303	2822	8303	48	4.0
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8305	2822	8305	46	3.8
2817	8306	2822	8306	45	3.8
2817	8306	2822	8306	45	3.8
2817	8306	2822	8306	45	3.8
2817	8306	2822	8306	45	3.8
2817	8306	2822	8306	45	3.8
2817	8306	2822	8306	45	3.8
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8307	2822	8307	44	3.7
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8308	2822	8308	43	3.6
2817	8309	2822	8309	42	3.5
2817	8311	2822	8311	40	3.3
2817	8311	2822	8311	40	3.3
2817	8311	2822	8311	40	3.3
2817	8311	2822	8311	40	3.3
2817	8312	2822	8312	39	3.3
2817	8312	2822	8312	39	3.3
2817	8312	2822	8312	39	3.3
2817	8312	2822	8312	39	3.3
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8402	2822	8402	37	3.1
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8403	2822	8403	36	3.0
2817	8404	2822	8404	35	2.9
2817	8404	2822	8404	35	2.9
2817	8404	2822	8404	35	2.9
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8
2817	8405	2822	8405	34	2.8

TABLE A-1 (continued)

Dec 1986 NEC	Dec 1986 Date	Mar 1987 NEC	Mar 1987 Date	Months	Years
2817	8405	2822	8405	34	2.8
2817	8406	2822	8406	33	2.8
2817	8406	2822	8406	33	2.8
2817	8406	2822	8406	33	2.8
2817	8406	2822	8406	33	2.8
2817	8407	2822	8407	32	2.7
2817	8407	2822	8407	32	2.7
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8408	2822	8408	31	2.6
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8409	2822	8409	30	2.5
2817	8410	2822	8410	29	2.4
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8411	2822	8411	28	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3
2817	8412	2822	8412	27	2.3

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8501	2822	8501	26	2.2
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8502	2822	8502	25	2.1
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8503	2822	8503	24	2.0
2817	8504	2822	8504	23	1.9
2817	8504	2822	8504	23	1.9
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2825	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8505	2822	8505	22	1.8
2817	8506	2822	8506	21	1.8

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8506	2822	8506	21	1.8
2817	8507	2822	8507	20	1.7
2817	8507	2822	8507	20	1.7
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6
2817	8508	2822	8508	19	1.6

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8508	2822	8508	19	1.6
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8509	2822	8509	18	1.5
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8510	2822	8510	17	1.4
2817	8511	2822	8511	16	1.3
2817	8511	2822	8511	16	1.3
2817	8511	2822	8511	16	1.3
2817	8511	2822	8511	16	1.3
2817	8511	2822	8511	16	1.3
2817	8511	2822	8511	16	1.3
2817	8512	2822	8512	15	1.3
2817	8512	2822	8512	15	1.3
2817	8512	2822	8512	15	1.3
2817	8512	2822	8512	15	1.3
2817	8601	2822	8601	14	1.2
2817	8601	2822	8601	14	1.2
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8602	2822	8602	13	1.1
2817	8603	2822	8603	12	1.0

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8603	2822	8603	12	1.0
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8604	2822	8604	11	0.9
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8605	2822	8605	10	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8606	2822	8606	9	0.8
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8607	2822	8607	8	0.7
2817	8609	2822	8609	6	0.5
2817	8610	2822	8610	5	0.4
2823	8605	2822	8605	10	0.8
3326	8101	3324	8101	74	6.2
3353	8602	3383	8602	13	1.1
3353	8602	3383	8602	13	1.1
3353	8609	3383	8609	6	0.5
3353	8609	3363	8609	6	0.5
3353	8611	3363	8611	4	0.3
3354	8504	3364	8504	23	1.9
3354	8609	3384	8609	6	0.5
3354	8611	3384	8611	4	0.3
3354	8611	3384	8611	4	0.3
3355	8211	3365	8211	52	4.3
3355	8611	3385	8611	4	0.3
3355	8611	3385	8611	4	0.3
3356	8609	3366	8609	6	0.5
3359	8603	3364	8603	12	1.0
3365	8603	3366	8603	12	1.0
3366	8610	3363	8610	5	0.4
3383	8606	3353	8606	9	0.8
3383	8606	3389	8606	9	0.8
3383	8606	3353	8606	9	0.8
3383	8609	3353	8609	6	0.5
3383	8609	3353	8609	6	0.5
3383	8609	3353	8609	6	0.5
3384	8609	3354	8609	6	0.5
3384	8611	3389	8611	4	0.3
3385	8606	3386	8606	9	0.8
3385	8606	3386	8606	9	0.8
3389	8504	9502	8504	23	1.9
4111	8106	4115	8106	69	5.8
4502	8511	4503	8511	16	1.3

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
4615	8303	4515	8303	48	4.0
4615	8506	4715	8506	21	1.8
4615	8509	9588	8509	18	1.5
4701	7107	4707	7107	188	15.7
4701	7208	4707	7208	175	14.6
4701	7304	4707	7304	167	13.9
4701	7401	4707	7401	158	13.2
4701	7403	4707	7403	156	13.0
4701	7403	4707	7403	156	13.0
4701	7407	4707	7407	152	12.7
4701	7509	4707	7509	138	11.5
4701	7510	4707	7510	137	11.4
4701	7606	4707	7606	129	10.8
4701	7606	4707	7606	129	10.8
4701	7607	4707	7607	128	10.7
4701	7704	4707	7704	119	9.9
4701	7801	4707	7801	110	9.2
4701	7902	4707	7902	97	8.1
4701	7904	4707	7904	95	7.9
4701	7904	4707	7904	95	7.9
4701	7906	4707	7906	93	7.8
4701	7908	4707	7908	91	7.6
4701	8103	4707	8103	72	6.0
4701	8109	4707	8109	66	5.5
4701	8109	4707	8109	66	5.5
4701	8109	4707	8109	66	5.5
4701	8202	4707	8202	61	5.1
4701	8205	4707	8205	58	4.8
4701	8311	4707	8311	40	3.3
4701	8311	4707	8311	40	3.3
4701	8311	4707	8311	40	3.3
4701	8311	4707	8311	40	3.3
4701	8405	4707	8405	34	2.8
4954	8608	4955	8608	7	0.6
5321	8011	5323	8011	76	6.3
5332	8204	5335	8204	59	4.9
5332	8506	5333	8506	21	1.8
5333	8411	5327	8411	28	2.3
5333	8511	5332	8511	16	1.3
5804	7605	5805	7605	130	10.8
5804	7709	5805	7709	114	9.5
5804	7905	5805	7905	94	7.8
5804	7908	5805	7908	91	7.6
6414	7705	6416	7705	118	9.8
6414	7812	6416	7812	99	8.3
6414	8409	6416	8409	30	2.5
6582	8011	8261	8011	76	6.3
6582	8605	8265	8605	10	0.8
6612	8602	6611	8602	13	1.1
6613	8005	6612	8005	82	6.8
6613	8412	6612	8412	27	2.3
7825	7405	7815	7405	154	12.8
7964	8408	7984	8408	31	2.6

TABLE A-1 (continued)

Dec 1986		Mar 1987			
NEC	Date	NEC	Date	Months	Years
8011	8605	2822	8605	10	0.8
8011	8611	2822	8611	4	0.3
8201	8607	8265	8607	8	0.7
8215	8602	8251	8602	13	1.1
8216	8601	8215	8601	14	1.2
8302	8312	8305	8312	39	3.3
8305	8611	8308	8611	4	0.3
8308	8611	8303	8611	4	0.3
8327	8404	8342	8404	35	2.9
8327	8511	8342	8511	16	1.3
8331	8612	9502	8612	3	0.3
8342	8305	8346	8305	46	3.8
8345	8110	8346	8110	65	5.4
8379	8512	8327	8512	15	1.3
9123	8304	9134	8304	47	3.9
9203	8209	9230	8209	54	4.5
9216	8608	9201	8608	7	0.6
9501	8208	9502	8208	55	4.6
9501	8306	9502	8306	45	3.8
9502	8011	1153	8011	76	6.3
9502	8608	3529	8608	7	0.6
9502	8609	3359	8609	6	0.5
9523	8108	9593	8108	67	5.6
9527	8610	8379	8610	5	0.4
9527	8611	3364	8611	4	0.3
9527	8611	9509	8611	4	0.3
9542	8512	9524	8512	15	1.3
9548	8611	9585	8611	4	0.3
9558	8410	9588	8410	29	2.4
9577	8412	9588	8412	27	2.3
9585	8605	4206	8605	10	0.8
9585	8609	2186	8609	6	0.5
9588	7904	9585	7904	95	7.9
9588	8609	9589	8609	6	0.5
9588	8609	9589	8609	6	0.5
9589	8008	9502	8008	79	6.6
9591	8102	9581	8102	73	6.1
9591	8502	9581	8502	25	2.1

APPENDIX B

SUPPORTING DATA TABLES

APPENDIX B

SUPPORTING DATA TABLES

This appendix contains supporting data for tables 6 and 7 of the text. Tables B-1 through B-4 are similar to table 1 of the text for the other EMR quarters (from June 1986 to June 1987) used to construct table 6. Tables B-5 through B-8 are similar to table 3 of the text for the other quarters (between June 1983 and June 1984) used to construct table 7.

TABLE B-1

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG:
M86 to J86

Award Date	Months from June 1986	Number	Proportion	Cumulative proportion
JUN 1986	0	2765	0.12	0.12
MAY 1986	1	6879	0.29	0.41
APR 1986	2	7406	0.31	0.72
MAR 1986	3	4903	0.21	0.92
FEB 1986	4	223	0.01	0.93
JAN 1986	5	172	0.01	0.94
DEC 1985	6	50	0.00	0.94
NOV 1985	7	46	0.00	0.94
OCT 1985	8	47	0.00	0.95
SEP 1985	9	27	0.00	0.95
AUG 1985	10	32	0.00	0.95
JUL 1985	11	37	0.00	0.95
JUN 1985	12	42	0.00	0.95
MAY 1985	13	58	0.00	0.96
APR 1985	14	16	0.00	0.96
MAR 1985	15	26	0.00	0.96
FEB 1985	16	24	0.00	0.96
JAN 1985	17	11	0.00	0.96
DEC 1984	18	29	0.00	0.96
NOV 1984	19	50	0.00	0.96
OCT 1984	20	49	0.00	0.96
SEP 1984	21	18	0.00	0.96
AUG 1984	22	22	0.00	0.97
JUL 1984	23	11	0.00	0.97
JUN 1984	24	18	0.00	0.97
MAY 1984	25	17	0.00	0.97
APR 1984	26	24	0.00	0.97
MAR 1984	27	19	0.00	0.97
FEB 1984	28	18	0.00	0.97
JAN 1984	29	13	0.00	0.97
DEC 1983	30	6	0.00	0.97
NOV 1983	31	20	0.00	0.97
OCT 1983	32	10	0.00	0.97
SEP 1983	33	48	0.00	0.97
AUG 1983	34	15	0.00	0.97
JUL 1983	35	17	0.00	0.98
JUN 1983	36	5	0.00	0.98
MAY 1983	37	5	0.00	0.98
APR 1983	38	9	0.00	0.98
MAR 1983	39	8	0.00	0.98
FEB 1983	40	4	0.00	0.98
EARLIER	>40	556	0.02	1.00
Total		23755		

No NEC Award Date	732
Post-J86 Award Date	229
Number of New NECs	24716
Individuals with New NEC	23749

TABLE B-2

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG:
J86 to S86

Award Date	Months from Sept 1986	Number	Proportion	Cumulative proportion
SEP 1986	0	5111	0.21	0.21
AUG 1986	1	5338	0.22	0.44
JUL 1986	2	6145	0.26	0.69
JUN 1986	3	4632	0.19	0.89
MAY 1986	4	395	0.02	0.90
APR 1986	5	324	0.01	0.92
MAR 1986	6	154	0.01	0.92
FEB 1986	7	142	0.01	0.93
JAN 1986	8	91	0.00	0.93
DEC 1985	9	98	0.00	0.94
NOV 1985	10	99	0.00	0.94
OCT 1985	11	68	0.00	0.95
SEP 1985	12	86	0.00	0.95
AUG 1985	13	135	0.01	0.95
JUL 1985	14	109	0.00	0.96
JUN 1985	15	83	0.00	0.96
MAY 1985	16	104	0.00	0.97
APR 1985	17	57	0.00	0.97
MAR 1985	18	59	0.00	0.97
FEB 1985	19	44	0.00	0.97
JAN 1985	20	22	0.00	0.97
DEC 1984	21	27	0.00	0.98
NOV 1984	22	18	0.00	0.98
OCT 1984	23	32	0.00	0.98
SEP 1984	24	32	0.00	0.98
AUG 1984	25	24	0.00	0.98
JUL 1984	26	135	0.01	0.99
JUN 1984	27	14	0.00	0.99
MAY 1984	28	16	0.00	0.99
APR 1984	29	17	0.00	0.99
MAR 1984	30	15	0.00	0.99
FEB 1984	31	13	0.00	0.99
JAN 1984	32	7	0.00	0.99
DEC 1983	33	4	0.00	0.99
NOV 1983	34	10	0.00	0.99
OCT 1983	35	6	0.00	0.99
SEP 1983	36	7	0.00	0.99
AUG 1983	37	7	0.00	0.99
JUL 1983	38	5	0.00	0.99
JUN 1983	39	7	0.00	0.99
MAY 1983	40	5	0.00	0.99
EARLIER	>40	199	0.01	1.00
Total		23896		

No NEC Award Date	632
Post-S86 Award Date	12
No. of New NECs	24540
Individuals with New NEC	23577

TABLE B-3

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG:
S86 to D86

Award Date	Months from December 1986	Number	Proportion	Cumulative proportion
DEC 1986	0	2539	0.11	0.11
NOV 1986	1	6577	0.29	0.40
OCT 1986	2	8056	0.36	0.76
SEP 1986	3	3104	0.14	0.89
AUG 1986	4	413	0.02	0.91
JUL 1986	5	130	0.01	0.92
JUN 1986	6	102	0.00	0.92
MAY 1986	7	114	0.01	0.93
APR 1986	8	88	0.00	0.93
MAR 1986	9	67	0.00	0.93
FEB 1986	10	95	0.00	0.94
JAN 1986	11	28	0.00	0.94
DEC 1985	12	36	0.00	0.94
NOV 1985	13	48	0.00	0.94
OCT 1985	14	421	0.02	0.96
SEP 1985	15	37	0.00	0.96
AUG 1985	16	47	0.00	0.97
JUL 1985	17	23	0.00	0.97
JUN 1985	18	41	0.00	0.97
MAY 1985	19	34	0.00	0.97
APR 1985	20	26	0.00	0.97
MAR 1985	21	32	0.00	0.97
FEB 1985	22	34	0.00	0.97
JAN 1985	23	16	0.00	0.97
DEC 1984	24	30	0.00	0.98
NOV 1984	25	21	0.00	0.98
OCT 1984	26	30	0.00	0.98
SEP 1984	27	19	0.00	0.98
AUG 1984	28	14	0.00	0.98
JUL 1984	29	12	0.00	0.98
JUN 1984	30	24	0.00	0.98
MAY 1984	31	18	0.00	0.98
APR 1984	32	16	0.00	0.98
MAR 1984	33	20	0.00	0.98
FEB 1984	34	20	0.00	0.98
JAN 1984	35	2	0.00	0.98
DEC 1983	36	7	0.00	0.98
NOV 1983	37	15	0.00	0.99
OCT 1983	38	13	0.00	0.99
SEP 1983	39	9	0.00	0.99
AUG 1983	40	10	0.00	0.99
EARLIER	>40	297	0.01	1.00
Total		22687		

No NEC Award Date	689
Post-D86 Award Date	0
No. of New NECs	23376
Individuals with New NEC	21975

TABLE B-4

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG:
M87 to J87

Award Date	Months from June 1987	Number	Proportion	Cumulative proportion
JUN 1987	0	3698	0.19	0.19
MAY 1987	1	5798	0.30	0.49
APR 1987	2	6534	0.33	0.82
MAR 1987	3	2180	0.11	0.93
FEB 1987	4	438	0.02	0.95
JAN 1987	5	103	0.01	0.96
DEC 1986	6	102	0.01	0.96
NOV 1986	7	62	0.00	0.97
OCT 1986	8	47	0.00	0.97
SEP 1986	9	72	0.00	0.97
AUG 1986	10	36	0.00	0.97
JUL 1986	11	49	0.00	0.98
JUN 1986	12	49	0.00	0.98
MAY 1986	13	37	0.00	0.98
APR 1986	14	29	0.00	0.98
MAR 1986	15	28	0.00	0.98
FEB 1986	16	21	0.00	0.99
JAN 1986	17	7	0.00	0.99
DEC 1985	18	23	0.00	0.99
NOV 1985	19	15	0.00	0.99
OCT 1985	20	9	0.00	0.99
SEP 1985	21	10	0.00	0.99
AUG 1985	22	12	0.00	0.99
JUL 1985	23	6	0.00	0.99
JUN 1985	24	4	0.00	0.99
MAY 1985	25	12	0.00	0.99
APR 1985	26	2	0.00	0.99
MAR 1985	27	9	0.00	0.99
FEB 1985	28	5	0.00	0.99
JAN 1985	29	3	0.00	0.99
DEC 1984	30	4	0.00	0.99
NOV 1984	31	4	0.00	0.99
OCT 1984	32	3	0.00	0.99
SEP 1984	33	9	0.00	0.99
AUG 1984	34	1	0.00	0.99
JUL 1984	35	0	0.00	0.99
JUN 1984	36	3	0.00	0.99
MAY 1984	37	3	0.00	0.99
APR 1984	38	3	0.00	0.99
MAR 1984	39	4	0.00	0.99
FEB 1984	40	2	0.00	0.99
EARLIER	>40	135	0.01	1.00
Total		19571		

No NEC Award Date	596
Post-J87 Award Date	366
No. of New NECs	20533
Individuals with New NEC	19855

TABLE B-5

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG
M83 TO J83

Award Date	Months to June 83	Number	Proportion
Jun 1983	0	11553	0.4908
May 1983	1	5853	0.2485
Apr 1983	2	4109	0.1745
Mar 1983	3	169	0.0071
Feb 1983	4	188	0.0079
Jan 1983	5	71	0.0030
Dec 1982	6	26	0.0011
Nov 1982	7	164	0.0069
Oct 1982	8	26	0.0011
Sep 1982	9	19	0.0008
Aug 1982	10	14	0.0005
Jul 1982	11	13	0.0005
Jun 1982	12	13	0.0005
May 1982	13	9	0.0003
Apr 1982	14	8	0.0003
Mar 1982	15	9	0.0003
Feb 1982	16	7	0.0002
Jan 1982	17	12	0.0005
Dec 1981	18	17	0.0007
Nov 1981	19	5	0.0002
Oct 1981	20	9	0.0003
Sep 1981	21	6	0.0002
Aug 1981	22	2	0.0000
Jul 1981	23	7	0.0002
Jun 1981	24	12	0.0005
May 1981	25	2	0.0003
Apr 1981	26	6	0.0000
Mar 1981	27	3	0.0002
Feb 1981	28	0	0.0001
Jan 1981	29	2	0.0000
Dec 1980	30	4	0.0001
Nov 1980	31	0	0.0000
Oct 1980	32	1	0.0000
Sep 1980	33	3	0.0001
Aug 1980	34	2	0.0000
Jul 1980	35	1	0.0000
Jun 1980	36	5	0.0002
May 1980	37	2	0.0000
Apr 1980	38	2	0.0000
Mar 1980	39	2	0.0000
Feb 1980	40	2	0.0000
EARLIER	40+	100	0.0038
TOTAL		22461	

No NEC award date	0
Post-J83 Award Date	1084
Number of New NECs	23545
Indiviiduals with NEW NEC	20404

TABLE B-6

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG
J83 TO S83

Award Date	Months to Sep 1983	Number	Proportion
Sep 1983	0	3090	0.1791
Aug 1983	1	5876	0.3406
Jul 1983	2	6261	0.3629
Jun 1983	3	478	0.0277
May 1983	4	118	0.0068
Apr 1983	5	300	0.0173
Mar 1983	6	43	0.0024
Feb 1983	7	77	0.0044
Jan 1983	8	29	0.0016
Dec 1982	9	25	0.0014
Nov 1982	10	72	0.0041
Oct 1982	11	22	0.0012
Sep 1982	12	33	0.0019
Aug 1982	13	36	0.0020
Jul 1982	14	19	0.0011
Jun 1982	15	34	0.0019
May 1982	16	18	0.0010
Apr 1982	17	30	0.0017
Mar 1982	18	30	0.0017
Feb 1982	19	21	0.0012
Jan 1982	20	8	0.0004
Dec 1981	21	23	0.0013
Nov 1981	22	5	0.0002
Oct 1981	23	14	0.0008
Sep 1981	24	10	0.0005
Aug 1981	25	10	0.0005
Jul 1981	26	7	0.0004
Jun 1981	27	4	0.0002
May 1981	28	10	0.0005
Apr 1981	29	8	0.0004
Mar 1981	30	7	0.0004
Feb 1981	31	13	0.0007
Jan 1981	32	3	0.0001
Dec 1980	33	21	0.0012
Nov 1980	34	4	0.0002
Oct 1980	35	3	0.0001
Sep 1980	36	5	0.0002
Aug 1980	37	4	0.0002
Jul 1980	38	3	0.0001
Jun 1980	39	12	0.0006
May 1980	40	8	0.0004
EARLIER	40+	432	0.0246
TOTAL		17226	

No NEC award date	0
Post-S83 Award Date	23
Number of New NECs	17249
Indiviiduals with New NEC	16667

TABLE B-7

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG
S83 TO D83

Award Date	Months to Dec 83	Number	Proportion
Dec 1983	0	3774	0.1658
Nov 1983	1	6433	0.2827
Oct 1983	2	5922	0.2602
Sep 1983	3	3844	0.1689
Aug 1983	4	801	0.0352
Jul 1983	5	117	0.0051
Jun 1983	6	100	0.0043
May 1983	7	75	0.0032
Apr 1983	8	85	0.0037
Mar 1983	9	102	0.0044
Feb 1983	10	127	0.0055
Jan 1983	11	61	0.0026
Dec 1982	12	46	0.0020
Nov 1982	13	37	0.0016
Oct 1982	14	53	0.0023
Sep 1982	15	31	0.0013
Aug 1982	16	46	0.0020
Jul 1982	17	40	0.0017
Jun 1982	18	53	0.0023
May 1982	19	37	0.0016
Apr 1982	20	10	0.0004
Mar 1982	21	38	0.0016
Feb 1982	22	9	0.0003
Jan 1982	23	21	0.0009
Dec 1981	24	28	0.0012
Nov 1981	25	8	0.0003
Oct 1981	26	0	0.0000
Sep 1981	27	3	0.0001
Aug 1981	28	9	0.0003
Jul 1981	29	3	0.0001
Jun 1981	30	6	0.0002
May 1981	31	6	0.0002
Apr 1981	32	7	0.0003
Mar 1981	33	4	0.0001
Feb 1981	34	5	0.0002
Jan 1981	35	2	0.0000
Dec 1980	36	5	0.0002
Nov 1980	37	2	0.0000
Oct 1980	38	1	0.0000
Sep 1980	39	1	0.0000
Aug 1980	40	4	0.0001
EARLIER	40+	92	0.0037
TOTAL		22048	

No NEC award date	0
Post-D83 Award Date	704
Number of New NECs	22752
Indiviiduals with New NEC	21882

TABLE B-8

DISTRIBUTION OF NEW NECs BY MONTHS OF REPORT LAG
M84 TO J84

Award Date	Months to June 84	Number	Proportion
Jun 1984	0	2833	0.1394
May 1984	1	6800	0.3348
Apr 1984	2	5300	0.2609
Mar 1984	3	3286	0.1618
Feb 1984	4	113	0.0055
Jan 1984	5	59	0.0029
Dec 1983	6	95	0.0046
Nov 1983	7	22	0.0010
Oct 1983	8	28	0.0013
Sep 1983	9	34	0.0016
Aug 1983	10	26	0.0012
Jul 1983	11	19	0.0009
Jun 1983	12	34	0.0016
May 1983	13	26	0.0012
Apr 1983	14	19	0.0009
Mar 1983	15	10	0.0004
Feb 1983	16	6	0.0002
Jan 1983	17	7	0.0003
Dec 1982	18	14	0.0006
Nov 1982	19	15	0.0007
Oct 1982	20	16	0.0007
Sep 1982	21	7	0.0003
Aug 1982	22	11	0.0005
Jul 1982	23	10	0.0004
Jun 1982	24	13	0.0006
May 1982	25	8	0.0003
Apr 1982	26	4	0.0001
Mar 1982	27	4	0.0001
Feb 1982	28	7	0.0003
Jan 1982	29	3	0.0001
Dec 1981	30	7	0.0003
Nov 1981	31	2	0.0000
Oct 1981	32	6	0.0002
Sep 1981	33	7	0.0003
Aug 1981	34	4	0.0001
Jul 1981	35	2	0.0000
Jun 1981	36	5	0.0002
May 1981	37	2	0.0000
Apr 1981	38	3	0.0001
Mar 1981	39	4	0.0001
Feb 1981	40	5	0.0002
EARLIER	40+	118	0.0052
TOTAL		18994	

No NEC award date	623
Post-J84 Award Date	692
Number of New NECs	20309
Indiviiduals with New NEC	19534